

# TECHNICAL PROGRAM - 20<sup>th</sup> IBCAST 2023

## ( Fluid Dynamics Activity )

	0930-1010	1010-1030	1030-1050	1050-1110	1110-1125	1125-1145	1145-1205	1210-1300	1300-1400	1400-1440	1440-1500	1500-1520	1520-1540	1540-1600	1600-1640	1640-1700	1700-1720	1720-1740	
<b>Day – 1</b> <b>22<sup>nd</sup> Aug</b>	<b>REGISTRATION &amp; CHECK-IN</b>														Invited Talk	1	2	3	
															Assistant Prof. Dr. Talha Irfan (IST)	ID-193	ID-184	ID-579	
<b>Day – 2</b> <b>23<sup>rd</sup> Aug</b>	Invited Talk (Online)	4	5	6	<b>TEA</b>	7	8	Invited Talk	<b>LUNCH</b>	Invited Talk	9	10	11	12					
	Prof. Dr. Liang Guozhu (BUAA)	ID-11	ID-112 <i>No Show</i>	ID-143		ID-94	ID-119	VADM(R) Ahmed Saeed		Prof. Dr. Qun Zheng (Harbin, China)	ID-224	ID-331	ID-476 <i>No Show</i>	ID-448					
<b>Day – 3</b> <b>24<sup>th</sup> Aug</b>	Invited Talk (Online)	13	14	15		<b>CHECK-OUT</b>													
	Prof. Dr. Gang Wang (NPU, China)	ID-366	ID-359	ID-188															
<b>Day – 4</b> <b>25<sup>th</sup> Aug</b>																			

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<b>DAY-1</b>	<b>S E S S I O N – I [ Chaired by Dr. Muhammad Rafique ]</b>	<b>22<sup>nd</sup> August 2023</b>
<b>16:00 – 16:40</b>	<b>Invited Talk – Use of CFD for Mechanical Circulatory Support System Design</b>	<b>Assistant Prof. Dr. Talha Irfan, IST</b>
<b>16:40 – 17:00</b>	<b>#1 [ID-193] - Effect of Rack Arrangement on Energy Consumption in a Data Center using Numerical Analysis</b>	<b>Fahad Butt, NUST</b>
<b>17:00 – 17:20</b>	<b>#2 [ID-184] - Numerical Simulation of Thermal Performance Enhancement of a PCM Heat Sink Under Different Heat Loads</b>	<b>Ozair Ghufuran Bhatti, CESAT</b>
<b>17:20 – 17:40</b>	<b>#3 [ID-579] - CFD Analysis of Vacuum Membrane Distillation for Saline Water</b>	<b>Faisal Iqbal, GIKI</b>

**DAY - 2 SESSION – I [ Chaired by Dr. Muhammad Rafique ]****23<sup>rd</sup> August 2023**

09:30 – 10:10	Invited Talk – Numerical Investigation of the Effect of Inlet Total Pressure on H2/Air Non-Premixed Rotating Detonation Combustor	Prof. Dr. Liang Guozhu, BUAA ( Online via Zoom )
10:10 – 10:30	#4 [ID-11] – On Dynamics Mode Decomposition: Application on flow past an Oscillatory Cylinder	Faheem Chughtai, NUST
10:30 – 10:50	#5 [ID-112] – Energy Harvesting in The Wake of Two Tandem Arranged Cylinders with Downstream Vibrating Cylinder	Arslan Ahmed, NUST (No Show)
10:50 – 11:10	#6 [ID-143] - Numerical Investigation of PCM Melting Performance in Concentric Tube Heat Exchanger Using Y-Shaped Fins	Aurang Zaib, NUST
11:10 – 11:25	T E A B R E A K	

**SESSION – II [ Chaired by Dr. Basharat Ali Haider ]**

11:25 – 11:45	#7 [ID-94] – Stability Augmentation of Micro Air Vehicle in Flying Wing Configuration under Propeller Slip Stream Effects	Azhar Abbas, NUST
11:45 – 12:05	#8 [ID-119] – Investigation and Design Improvement of Wind Farm and Multi-Rotor Arrangement of Hybrid VAWT for Energy Harvesting	Ahsan Iqbal, NUST
12:10 – 13:00	Invited Talk – Titan: A Trail of Errors & Omissions [ Plenary Session of UW Track ]	Vice Admiral(R), Ahmed Saeed, HI(M)
13:00 - 14:00	L U N C H B R E A K	

**SESSION – III [ Chaired by Dr. Muhammad Rafique ]**

14:00 – 14:40	Invited Talk – A Highly Loaded Axial Helium Compressor Design Method	Prof. Dr. Qun Zheng, Harbin
14:40 – 15:00	#9 [ID-224] – Aerodynamic Shape Optimization of Omni-Directional Anemone for Max Power Extraction	Durr-e-Shahwar, IST
15:00 – 15:20	#10 [ID-331]– Numerical Analysis Of Buffet-Causing Phenomenon In Hammerhead Shaped Body	Dr. Shamoon Jamshed, IST
15:20 – 15:40	#11 [ID-476]– Cavity Noise Reduction through Fluid-Structure Interaction of Wall Mounted Elastic Panel	Irsalan Arif, NUST (No Show)
15:40 – 16:00	#12 [ID-448]– Bio-Heat Transport Analysis of Radiating Jeffery Fluid Under the Application of Peristaltic Motion	Dr. Abdul Samad Khan, NPU

**DAY-3****S E S S I O N – I [ Chaired by Dr. Syed Bilal ]****24<sup>th</sup> August 2023**

<b>09:30 – 10:10</b>	<b>Invited Talk – Numerical analysis of transonic buffeting on aerospace vehicle configurations</b>	<b>Prof. Dr. Gang Wang, NPU, XI'AN, China (Online via Zoom)</b>
<b>10:10 – 10:30</b>	<b>#13 [ID-366] – Numerical Investigation of the Effect of Inlet Total Pressure on H2/Air Non-Premixed Rotating Detonation Combustor</b>	<b>Prof. Dr. Liang Guozhu, BUAA (Online via Zoom)</b>
<b>10:30 – 10:50</b>	<b>#14 [ID-359] – Numerical Study on Working Process of Gas-filled Accumulator</b>	<b>Tong Shi, Beihang</b>
<b>10:50 – 11:10</b>	<b>#15 [ID-188] – Spike Based Aerodynamic Shape Optimization Analysis of ICBM using Machine Learning and CFD Techniques</b>	<b>Amna Khan, IST</b>

**C H E C K - O U T**